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Gender Differences in Poverty in an International Comparison: An Analysis of the Laeken Indicators

András Gábos

The role of the dimension of gender in the Laeken indicator system

Through the 1990s the community objectives of the European Union gradually spread to the domain of social policy. This appeared among the strategic goals accepted at the Lisbon summit held by the EU Heads of State and Government in December 2000. As well as pledging to make the EU the most competitive economy, these goals gave priority to social cohesion; that is, to just distribution of the gains of increased competitiveness. While the welfare systems of the member states certainly have to face challenges of this sort, especially those related to demographic problems, the substantial differences that have emerged between various institutional systems over the decades make it impossible to create a common European social policy in the short- or medium-term. For this reason, in implementing the programme of social cohesion, the process of making decisions and putting those decisions into practice relies not on common, nationwide regulations and institutions but on a method of so-called open coordination. The central tools of the method are the sharing of national-level experiences, continuous feedback, planning and monitoring. With this in mind, the policy makers at the Laeken meeting of the European Council in December 2001 agreed to endorse a three-level statistical indicator system (henceforth the Laeken indicators). The system provides a means of monitoring progress in social inclusion, and thus serves to assist member states and the European Commission in achieving the common objective of combating poverty and social exclusion.

The indicator system consists of three levels, where the selection of the indicators for the third level is the responsibility of individual countries. The system was formulated to capture the multidimensional nature of social exclusion and the ways of acquiring resources necessary for social integration. The major measures of income poverty form a substantial proportion of the set of indicators. These measures are based on the concept of relative income.²

¹ The author would like to thank Orsolya Vámos for her assistance in data collection.

² The indicators are computed using a uniform method. Income is defined as the total annual available equivalent income of the household. Equivalent income is calculated on the basis of

The Laeken indicators, especially the income-based poverty indices, are computed for both the total population and major socio-demographic groups, allowing, *inter alia*, the juxtaposition of the two gender groups as well. The current study examines gender differences in the various dimensions of poverty with the help of the Laeken indicators. Comparison of the male and female populations in terms of the incidence and depth of poverty is carried out using the most recent available dataset that is best suited to a cross-sectional comparison. In the first part of the paper the Laeken indicator system is outlined, with a special focus on the dimension of gender within the indicator sets. The second part presents the overall comparative analysis of gender differences in the rate of poverty and the poverty gap. The following section examines several factors that may underlie differences or lack of differences between the two sexes. The parameters discussed here include age, economic activity, household structure and the availability of welfare transfers. Finally, our major findings are summarized.

The incidence and depth of poverty as a function of gender

The relative concept of income poverty adopted as the basis of the Laeken indicator system is based on the idea that the poverty of an individual is determined by his or her income position relative to the rest of society; that is, the position he or she occupies within the income inequality structure of the given society. For this reason, international comparisons using these indicators reveal patterns of income inequality characteristic of individual countries rather than the absolute living standards of members of the population. Comparing the aggregate poverty rates of the EU-15 with those of the new member states, no differences are found in this respect³ (see *Figure 1*). The rate of poverty is highest in Turkey (25%), followed by the Mediterranean states, the Anglo-Saxon countries and some of the Central and Eastern European countries (Croatia, Estonia, Romania and Latvia). The incidence of poverty is lowest in the Scandinavian states and in The Netherlands, but some of the new member states also fall into this category (the Czech Re-

the so-called modified OECD-II scale, which assigns one consumption unit to the first adult member of the household, 0.5 units to other members over 14 years of age and 0.3 units to members under 14. In calculating the income poverty indices, 60% of the median income is regarded as the poverty threshold. The units of analysis are individual people in all cases.

³ The data used for the study come from two major sources: the official reports of the European Committee and EUROSTAT, and the online database of the latter. Due to the correction of the micro-databases used for computing the indicators, the information content covering the same time period may differ between the two sources. The results presented here mostly rely on publications, and any missing data are supplied from the NewCronos database. The analysis refers to data for the year 2001 when available and the closest available year otherwise.

public and Slovenia). According to the EU-certified data of the Hungarian Central Statistical Office (HCSO), Hungary also belongs to the group of low-risk countries (with a poverty rate of 10%), while an alternative survey, the Household Monitor by the TÁRKI Social Research Institute (henceforth the TÁRKI Monitor) groups Hungary with medium-risk countries (with a poverty rate of 13%).⁴

A number of methods are available for comparing the results of the various categories of a variable. We can focus on actual numerical differences expressed in percentage points, or on a measure of relative risk expressed as the ratios of the values of the indicators. In the following analyses we shall rely on the latter method.

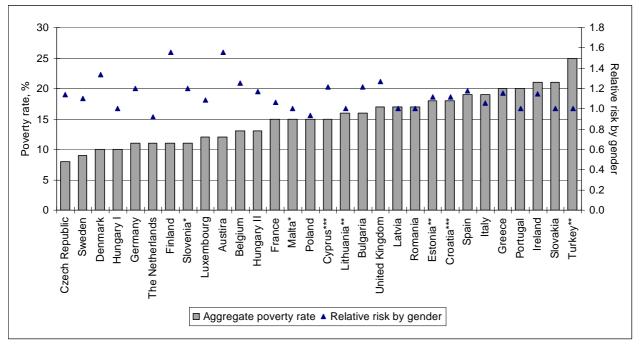
In most countries, the poverty rates differ between men and women. This difference, however, seems to be significant in only a few cases; by and large it remains within the statistical margin of error (see Figure 1). The degree of relative risk in the dimension of gender does not appear to be related to the magnitude of poverty rate. It can be seen, however, that differences have a greater variance within the group of countries with the lowest poverty rates. The relative risk for women is highest in Finland and Austria (1.6), followed by Belgium, Denmark and the United Kingdom (1.3). There are countries where we find no differences at all, or only minimal differences between the poverty rates of the two sexes. Several new member states and accession countries are found in the latter group. This category includes Hungary, where, according to official sources, there are no differences between the poverty rates of men and women. The TÁRKI Monitor puts the risk ratio for women at 1.2. The incidence of poverty is greater for men than for women in The Netherlands and in Poland, but the difference is statistically negligible.

The concept of a poverty gap is an important component of measures of poverty, including the Laeken indicator set. The poverty gap indicates the distance between those living in poverty and the non-poor. In *Figure 2* the value of the indicator and the poverty risk ratio of the two sexes are shown for each country. The graph reveals that the depth of poverty is greatest in the countries where the incidence of poverty is also large. A more interesting picture emerges from the measure of gender differences and its distribution (*Figure 2*). In the majority of cases depth of poverty is smaller among women than among men. It seems, then, that the poverty of European women is, in general, somewhat greater than the poverty of men, but the position of poor women is less severe than that of men living below the poverty threshold.

 $^{^4}$ See Gábos and Szivós (2004) for the Laeken indicators calculated for 2001 and 2003 on the basis of the TÁRKI Monitor.

Figure 1

Aggregate poverty rates and relative risks by gender in the member states of the European Union, in accession and candidate countries at the turn of the millennium

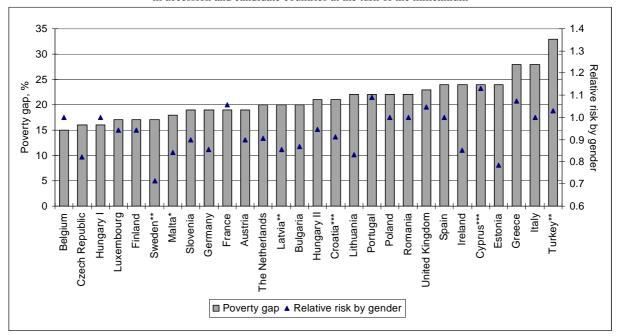


Source: EUROSTAT (2005)

Note: The data are for 2001, except: * year 2000, ** year 2002, *** year 2003.

Hungary I—official report by the HCSO ratified by EUROSTAT; Hungary II—results of the TÁRKI Monitor. In calculating relative risk by gender, poverty rates for women were compared to poverty rates for men.

Poverty gaps and gender differences in the member states of the European Union, in accession and candidate countries at the turn of the millennium



Source: EUROSTAT (2005)

Note: The data are for 2001, except: * year 2000, ** year 2002, *** year 2003.

There are no data for distribution by gender for Denmark.

Hungary I—official report by the HCSO ratified by EUROSTAT; Hungary II—results of the TÁRKI Monitor. In calculating relative risk by gender the indicators referring to women were compared to the corresponding indicators for men. The poverty gap shows the distance of the median income of the poor from the poverty threshold, expressed as a percentage of the poverty threshold.

Alternative sources once again depict different pictures of Hungary. According to the official report, the poverty gap in Hungary is one of the lowest in Europe (16%), while the TÁRKI Monitor places the country in the middle range (21%). The difference between the sexes is not statistically significant in either source.

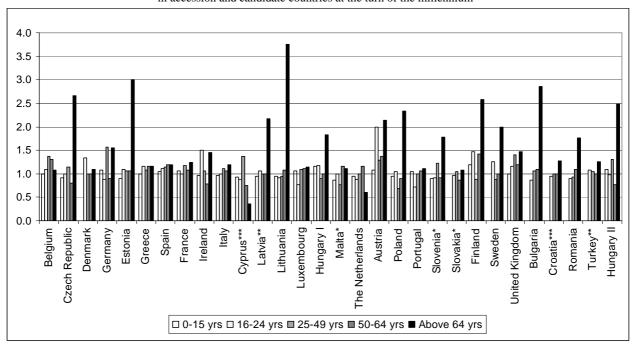
We can conclude that the poverty risk for women is higher than the risk for men in almost all member states of the European Union, but the difference, with a few exceptions, is not substantial. It is not impossible that differences between men and women observed at the aggregated level are replicated in individual socio-economic demographic groups. We expect the contrary, however: the proximity of the aggregate indicators for men and women may be the result of the concatenation of effects of opposing directions.

Gender differences in groups differentiated by age and labour market status

Within individual age groups, gender differences in poverty rates are only noticeable among people over 65. This can clearly be seen in *Figure 3*. A significant gender difference in relative risk, a ratio of at least 1.5, is only observed in the oldest age group. Differences of this magnitude only occur sporadically among younger people. This is observed for the 16–24 age group in Austria and Ireland, and for the 25–49 age group in Germany. The figure also reveals variation across countries and across age groups as to whether women or men are in a worse position as regards poverty.

Among the elderly, the position of women is considerably worse than the position of men in several of the countries. In Ireland and Austria, for instance, the poverty rate is 16 percentage points higher for women than for men among the pensioner-age population. This difference is 14 percentage points in Estonia and 13 in Finland and Bulgaria. Measured in terms of relative risk, the relative position of women within the over-65 group is worst in Lithuania, where the poverty rate of women is almost four times (3.8) higher than that of men. This measure is also high for Estonia (3.0), Bulgaria (2.9) the Czech Republic (2.7), Finland (2.6), Poland (2.3), Latvia (2.2) and Austria (2.1). For Hungary, the official figures published by the Hungarian Central Statistical Office put the poverty rate of women in the over-65 group seven percentage points above the poverty rate of men, which gives a risk ratio of somewhat less than 2. According to the TÁRKI Monitor, the difference between the poverty rates of the sexes is eight percentage points, their ratio being 2.5.

Figure 3
Relative poverty risk by gender, broken down into age groups in the member states of the European Union, in accession and candidate countries at the turn of the millennium



Source: Commission (2004a), Dennis and Guio (2004), EUROSTAT (2005)

Note: The data are for 2001, except: * year 2000, ** year 2002, *** year 2003. The countries are arranged in order of increasing poverty rates among the population of 65 years of age and over. Hungary I—official report by the HCSO ratified by EUROSTAT; Hungary II—results of the TÁRKI Monitor. The source of data for Slovakia, Bulgaria, Croatia, Romania and Turkey is the NewCronos dataset. No data are available for the 0–15 age group for Bulgaria, Denmark, Croatia, Sweden, Slovakia or Turkey. In calculating relative risk by gender the indicators referring to women were compared to the corresponding indicators for men.

The differences between men and women in the oldest age group cannot be attributed to economic retirement. Analysis of poverty rates for various categories of economic activity shows that gender differences in poverty risk among old-age pensioners are not at all prominent (see *Table 1*). The greater relative risk of women is no more salient within the population of old-age pensioners than it is among the group of people aged 65 or over. This is especially true of Finland (2.4), the Czech Republic (2.3) and Sweden (2.0). The poverty of women is more widespread in 'other inactive' (dependent) groups as well. The relative risk of women is almost twice as high in Malta and Belgium (1.9), as well as in Cyprus (1.7). A different picture emerges for the unemployed population. Men in this group have a substantially higher risk of poverty than women. In Denmark and Sweden, the index of relative risk of unemployed men compared to women is 1.9. This figure is also high for Malta (1.8) and the United Kingdom (1.7).

Among employed and self-employed people the picture is fairly varied, with differences between the sexes occurring in both directions. The risk of poverty for employees shows less variance across countries than the risk for the self-employed, and remains under 10% in all the countries. Differences between the sexes within the employed population are to men's advantage in Denmark (2.0), Finland (1.7) and the United Kingdom (1.5), while women are in a considerably better position in terms of relative poverty risk in Malta (4.0), Italy (2.5) and Portugal (2.3).

In the case of the self-employed population, on the other hand, poverty rates show considerable variation across countries. In some of the states (Malta, Luxembourg, Hungary, Germany and the Czech Republic), poverty rates for this economic category are exceptionally low, up to 5%. In other countries (Lithuania, Greece, France, Sweden, Austria and Latvia), at least every fifth self-employed person can be considered to be poor. These striking differences may be attributed to a number of factors, including the composition of the group as regards branch of activity, the small size of the sample and a possible tendency to underestimate income.

This also indicates that, while the poverty of employees and their families is substantially lower than the population average, presence in the labour market does not provide complete protection from poverty. This observation led to the decision to include a new indicator in the Laeken set. This measure of in-work poverty shows the poverty rates of employees and those in self-employment with subcategories defined along various dimensions. The index for employees, calculated on the basis of the 2001 survey, was 7% with reference to the mean of the EU-15—half of the figure measured with reference to the entire population (15%). The results shown in the first column of *Table 1* reveal that, within the group of employees, there are no significant differences between men and women. There are two exceptions to this generalization, Ireland and Italy, where men are twice as likely to become poor as women.

Table 1
Relative poverty risk by gender, broken down into labour market status in the member states of the European Union, in accession and candidate countries at the turn of the millennium

	Employed			Un-	Pen-	Other
Countries	Total	Employee	Self- employed	employed	sioner	inactive
Austria	1.0	1.0	0.9	1.1 ^{a)}	1.5	1.1
Belgium	1.0	1.3	0.7	0.7	0.9	1.9
Cyprus***	n.d.	0.6	0.7	1.5	1.1	1.7
Czech Republic	n.d.	1.0	0.3	1.0	2.3	1.1
Denmark	0.7	2.0	1.0	0.5	1.0	1.0
Estonia	n.d.	1.3	0.9	0.9	1.5	0.9
Finland	1.2	1.7	1.3	0.7	2.4	0.8
France	0.8	0.7	1.1	0.8	1.1	1.0
Germany	1.5	1.3	1.5	0.6	1.2	1.0
Greece	0.9	1.0	1.0	0.7	1.2	1.2
Hungary I	n.d.	0.8	1.0	0.7	1.0	1.2
Hungary II	n.d.	1.2	0.8	1.0	1.3	1.1
Ireland	0.4	0.6	0.7	$0.6^{a)}$	1.5	1.2
Italy	0.5	0.4	0.7	0.9	0.9	1.2
Latvia**	n.d.	1.1	1.1	0.9	1.6	0.8
Lithuania	n.d.	0.9	1.0	0.9	2.1	1.1
Luxembourg	1.0	1.0	$0.0^{a)}$	$0.0^{a)}$	1.1	0.6
Malta*	n.d.	0.3	0.0	0.6	1.0	1.9
Poland	n.d.	0.7	1.1	0.9	1.2	1.1
Portugal	0.8	0.4	1.3	0.6	1.0	0.9
Slovenia	n.d.	1.0	1.0	1.1	1.4	1.0
Spain	0.8	0.7	1.0	0.7	0.5	1.3
Sweden	1.0	1.3	1.0	0.5	2.0	1.0
The Netherlands	0.9	n.d.	n.d.	1.3	0.0	0.8
United Kingdom	1.2	1.5	1.1	0.6	1.4	1.1

Source: Commission (2004a), Dennis and Guio (2004), Bardone and Guio (2005), EUROSTAT (2005)

In calculating relative risk by gender the indicators referring to women were compared to the corresponding indicators for men. However, in the text we refer a few times to the relative risk of men compared to women. Those values are calculated as the reciprocal of the relative risk indicated above in *Table 1*.

Notes: The data are for 2001, except: * year 2000, ** year 2002, *** year 2003.

a) some of the cells used to calculate the index had a small number of cases. n.d.: no data No data are available for Slovakia, Bulgaria, Croatia, Romania or Turkey.

Hungary I—official report by the HCSO ratified by EUROSTAT; Hungary II—results of the TÁRKI Monitor.

Poverty rates by household type: the poverty risk of single-parent households

In the European Union, poverty is higher than average among children, and people living in single-parent households are among those at greatest risk of poverty.⁵ The proportion of this type of household to all households varies greatly across European countries. In 2001 the highest figures were to be found in Sweden (22%) and in the United Kingdom (17%). In Mediterranean countries, by contrast, the value of the indicator fell by 3–4% for the same year. Differences within the EU-15 are much smaller, however, when the proportions of female single parents to all single parents are compared. This figure ranges from 74% (Sweden) to 95% (Ireland).⁶ No data are available for gender differences within single-parent households. It unequivocally follows, however, from the high proportion of women as single parents that it is essentially women that are affected by the very high risk of poverty facing this household type.

Figure 4 compares the risk of poverty for single-parent households in the member states of the European Union and in accession and candidate countries. In the majority of the countries the poverty rates of single-parent households are one and a half to two times the rates for the population as a whole. In nine of the countries this ratio is even higher than 2 (e.g. Luxembourg, Germany, The Netherlands, the Czech Republic, Malta). It can also be seen that the poverty risks facing people living in single-parent households are higher than average in the Anglo-Saxon countries and a number of continental welfare states. The countries with the lowest risk are the Scandinavian states and some of the new member states.

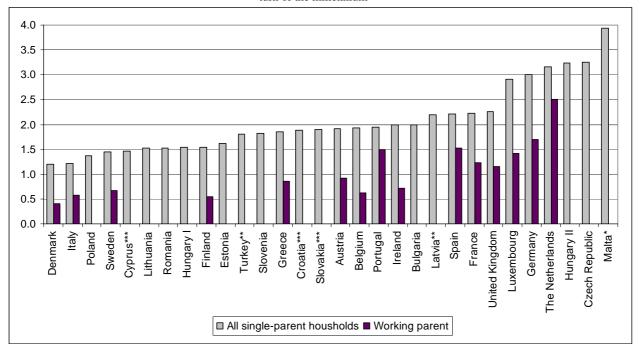
We have seen that the above-average poverty rates for single-parent households primarily affect women bringing up their children on their own. Their vulnerability in terms of poverty and social exclusion can, however, largely be traced back to their position in the labour market. The data available for the EU-15 show that, in countries with very high risks, the proportion of households where the single mother does not work is typically also very high. In 2001 the proportion of inactive households was 40% in The Netherlands, 34% in Germany, 40% in the United Kingdom and 31% in Ireland, compared to the EU-15 average of 29%. There is one exception: in Luxembourg the proportion of inactive or unemployed households within this group was only 6%.

⁵ See, for instance, Förster et al. (2002), Commission (2004b), Gábos (2004).

⁶ As reported by EUROSTAT (2005).

⁷ EUROSTAT (2005).

Figure 4 Poverty risk of single-parent families in the member states of the European Union, in accession and candidate countries at the turn of the millennium



Source: Bardone and Guio (2005), EUROSTAT (2005)

Notes: The data are for 2001, except: * year 2000, ** year 2002, *** year 2003.

Hungary I—official report by the HCSO ratified by EUROSTAT; Hungary II—results of the TÁRKI Monitor.

The importance of labour market position is also apparent if we compare the poverty rates of families with a single working parent to the rates for all people living in single households. The comparison (*Figure 4*) reveals that, in the majority of EU-15 countries, the poverty risks are actually lower for working single parents than they are for the population as a whole. The countries in this group typically occupy positions at the lower end of poverty rates for any single-parent household. On the whole, active single-parent households invariably have a lower risk of poverty than the average for the household type.

The role of welfare transfers

The Laeken indicators allow us to investigate the poverty-alleviating effects of welfare systems not only among the total population but also among men and women separately. We have previously discussed poverty rates computed with reference to the total available income. These can be compared to rates calculated on the basis of incomes excluding welfare transfers, and differences between the two indicators can be used to characterize the effectiveness of a country's social benefit system in reducing income inequalities. Figure 5 gives a summary of the indicators excluding all welfare transfers and excluding all transfers but pensions. First, the increase in the poverty rate in the absence of welfare transfers was calculated in percentage points for each country. As a second step, the ratio of this difference for men and women was computed, giving a measure of relative risk increase. A value greater than 1 indicates that, in the country concerned, the poverty of women would be greater if there were no welfare programmes.

The results show that welfare transfers—with pensions included—give greater protection from poverty to women than to men. With pensions removed from the set of welfare transfers, however, the difference between the poverty rates of men and women is substantially reduced and its direction varies across countries.

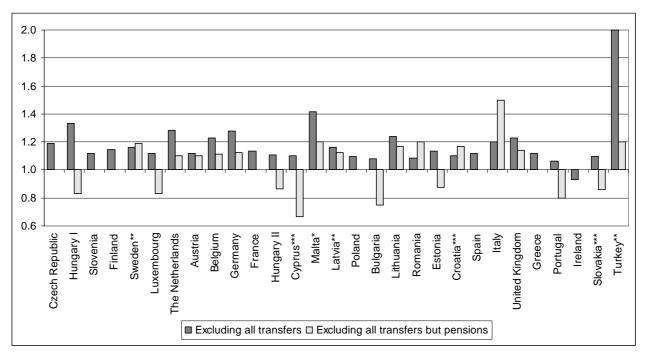
transfers provided by the welfare system—such as pensions—do not serve to alleviate poverty. This is the reason why the indicators include poverty rates calculated on the basis of income including pension but excluding other social transfers.

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⁸ The method is used, among others, by Förster and Tóth (1999), World Bank (2001), Förster *et al.* (2002). This method is widely used in the literature. It must be noted, however, that the method can only give hypothetical results, since, in the absence of welfare transfers, people's behaviour would change: they would make different decisions in order to gain income and the government's tax and allowance policies would clearly be different as well. The method cannot take tax relief measures into consideration. Besides, a considerable proportion of the

Figure 5

The poverty-alleviating effect of welfare systems—gender differences in the member states of the European Union, in accession and candidate countries at the turn of the millennium



Source: EUROSTAT (2005)

Notes. The data are for 2001, except: * year 2000, ** year 2002, *** year 2003. No data on gender differences are available for Denmark. Hungary I—official report by the HCSO ratified by EUROSTAT; Hungary II—results of the TÁRKI Monitor. In calculating relative risk by sex the indicators referring to women were compared to the corresponding indicators for men.

The results showing the effects of the pension system are hardly surprising: it follows from the high proportion of women within the pensioner population that the poverty-alleviating effect of the transfer is stronger among women. As regards other types of social transfer, their observed effects—in terms of distribution—corroborate our previous findings: there is no significant difference between the poverty risks of men and women.

Summary

In our study gender differences in income poverty were examined with the help of the Laeken indicators. Gender differences in the incidence and depth of poverty were analysed and the origins of differences and similarities were investigated along a number of dimensions. These factors included age, economic activity, household structure and welfare transfers. Our major findings can be summarized as follows:

- In the majority of countries in the European Union, poverty rates differ between men and women, although this difference appears to be significant in only a few cases and it mostly remains within the statistical margin of error.
- The poverty of European women is, in general, somewhat greater than the poverty of men, but the position of poor women is less severe than that of men living below the poverty threshold.
- Within individual age groups, gender differences in poverty rates are only noticeable among people over 65. Among the elderly, the position of women is considerably worse than the position of men in several of the countries.
- The analysis of labour market status indicates that the differences between men and women in the oldest age group cannot be attributed to economic retirement. Comparison of various categories of economic activity shows that gender differences in the risk of poverty among old-age pensioners are not at all prominent. The greater relative risk facing women is no more significant within the population of old-age pensioners than it is among the non-pensioner inactive population, while in most European countries, among the unemployed the relative poverty of women is actually lower.
- The above-average poverty rates of single-parent households primarily affect women bringing up their children on their own, but their vulnerability in terms of poverty and social exclusion can largely be traced back to their position in the labour market.
- Concerning the poverty-alleviating effects of welfare programmes,
 we found that transfers including pensions give greater protection to women
 than to men due to the high proportion of women within the pensioner popu-

lation. As regards other types of social transfer, their observed effects corroborate our previous findings: there is no significant difference between the risk of poverty for men and women.

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